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Abstract

A technique for providing reliability to an interconnect fabric for communication among a set of nodes. The technique may be used to efficiently and programmatically produce a cost-effective interconnect fabric having a degree of reliability over a range of design problems. In one aspect, ports associated with each node are partitioned into a first set of ports and a second set of ports. A primary interconnect fabric is formed among the first set of ports in response to a set of flow requirements and a backup interconnect fabric is formed among the second set of ports. The backup interconnect fabric carries a portion of communications carried by the primary fabric so as to protect against a failure of an element in the primary fabric